

## BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

| In the Matter of:                           | ) |                      |
|---|---|----------------------|
|   | ) |                      |
| Unlicensed Use of the 6 GHz Band            | ) | ET Docket No. 18-295 |
|   | ) |                      |
| Expanding Flexible Use in Mid-Band Spectrum | ) | GN Docket No. 17-183 |
| Between 3.7 and 24 GHz                      | ) |                      |

## COMMENTS OF THE ASSOCIATION OF FEDERAL COMMUNICATIONS CONSULTING ENGINEERS

These comments are submitted on behalf of the members of the Association of Federal Communications Consulting Engineers (AFCCE) whose members consult for broadcast companies across the United States.<sup>1</sup>

The FCC recently released a Notice of Proposed Rulemaking (NPRM) to permit unlicensed use in portions of the 1200 megahertz of spectrum in the 5.925–7.125 GHz ("6 GHz") band. Currently, broadcast radio and television stations rely on the proposed U-NII-6 and U-NII-8 bands for electronic news-gathering (ENG) and other broadcast auxiliary services (BAS). These services are vital to the operation of stations throughout the U.S. The Commission's proposed unlicensed use of these two bands involves low-powered operations at indoor locations only. AFCCE is concerned that these proposed restrictions will not prevent interference from occurring. AFCCE does not believe that attenuation from building walls and windows is a realistic barrier to prevent

AFCCE is a professional organization composed of members who provide technical, legal and other supporting roles in the communications industry to serve clients having matters under the purview of the Commission, including a significant number of members who are registered/licensed professional engineers. AFCCE has worked with the FCC for over 70 years to provide comments, guidance, and recommendations on such topics as rule interpretation, technical collaboration, and assessing the impacts of FCC technical policy and rules.



interference from occurring. Additionally, many BAS operations are conducted indoors. ENG operations often involve breaking-news and therefore random events and often located in residential areas, where Wi-Fi operations are ubiquitous. The proposed unlicensed and uncoordinated operations are therefore likely to interfere with low-powered "camera back" video links commonly employed by ENG crews.

Additionally, long-distance ENG links can be interfered with due to the "near-far problem" of U-NII devices operating in the vicinity of passive ENG receivers while the ENG transmitter is located far away.

Accordingly, AFCCE urges the Commission not to permit unlicensed operations in any of the bands authorized for mobile broadcast auxiliary use until and unless a rigorous and reliable method is developed to ensure unlicensed devices are automatically shut down when ENG operations are occurring in the vicinity.

> Respectfully Submitted, Association of Federal Communications Consulting Engineers By

Jonathan N. Edwards, P.E. AFCCE-FCC Liaison February 15, 2019